

REMARKS/ARGUMENTS

Claims 1-3 and 6-8 are active in this application.

Claim 1 is amended to define the core abrasive material as diamond. The other changes are to put the dependent claims in proper antecedent form.

The objection relating to Claim 8 is no longer applicable in light of the amendment.

No new matter is added.

The obviousness rejection citing EP '261 and ZA '995 is respectfully traversed as the combination of these citations do not suggest the two layers on the diamond core as claimed contrary to the contention provided in the Action.

EP '261 describes a coating for CBN particles not diamond. The coating has a primary layer which can include a layer of metallic carbide or nitride, page 3, line 14 - and an outer layer which can be a boride, nitride, carbide or oxide, see page 3 line 57.

EP '261 does not describe an outer layer as a carbonitride, which is the required outer layer as claimed.

Therefore, EP '261 does not describe a diamond core nor a carbonitride, two explicit limitations in the claims.

As this is an obviousness rejection, what does ZA '995 describe?

ZA '995 does describe carbonitride layers. However, the ZA '995 coating is a primary coating and not a outer layer or coating as in the claims.

The outer layer is bound to the diamond through the inner coating which comes into contact. The purpose and function of the outer layer is, however, entirely different. The outer layer tailors the physical and chemical properties of the coating so as to achieve a balance between often competing requirements in the coating such as those set out on pages 5 and 6 of the specification. These are not issues or considerations discussed by ZA '995 and

one would not look to ZA '995 (which describes only a primary coating) to apply two layers, an inner and an outer as in the claims.

EP '261 only describes CBN cores. While the Rejection alleged that diamond and CBN can be interchanged and in some applications this may be true, in the coating of the abrasive, this is not true.

As the coating comes into contact with the abrasive, the chemistry of the abrasive is significant. Diamond is carbon and CBN is boron and nitrogen. As the chemistry of the two abrasives is so different so could the coatings. Further, the matrices into which the coated abrasives are put differ between coated diamond and coated CBN. Thus, the balance between competing requirements of the coating — specification pages 5 and 6 — differ between diamond and CBN. Thus, in the field of coated abrasives it is not the case that one can interchange diamond and CBN.


By providing the inner layer chemically bonded to the abrasive and the outer layer compatible with the inner layer, the abrasive is well-protected from attack by matrix components--for which the outer layer is also compatible. As a result, there is improved performance, longer tool life and higher productivity (see pp. 4, line 9 to pp. 5, line 5 of the specification).

Withdrawal of the rejection is requested.

A Notice of Allowance is requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Daniel J. Pereira
Registration No. 45,518

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)